



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Adress: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,994	09/14/2006	Yoshinobu Kobayashi	080306.57341US	2596
23911	7590	09/17/2008	EXAMINER	
CROWELL & MORING LLP			PRICE, CRAIG JAMES	
INTELLECTUAL PROPERTY GROUP			ART UNIT	PAPER NUMBER
P.O. BOX 14300			3753	
WASHINGTON, DC 20044-4300				
MAIL DATE		DELIVERY MODE		
07/17/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,994	Applicant(s) KOBAYASHI ET AL.
	Examiner Craig Price	Art Unit 3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 9/14/2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 02 February 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1448)
 Paper No(s)/Mail Date 2/2/2006
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plural directional control valves (claim 1) and the parallel and tandem passages must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. **Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).** If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 5 is objected to because of the following informalities: Line 5 recites the limitation, "a spring", this should be -- a second spring --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation in claim 1, "a tandem passage connecting said plural directional control valves in series with each other", is unclear. It is unclear as to how the passage is arranged in series. The limitation in claim 5, "a seat portion is arranged in said parallel passage" is unclear. It would appear that this seat portion is arranged in a clearance, see specification page 14, lines 12-16, communicating with the parallel passage. Appropriate correction is required, without adding new matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Cho (5,592,967).

Cho discloses a directional control valve block (see Figure 2, Prior art) comprising plural directional control valves in a valve main body, each of the directional control valves being provided with a slidable spool, a pair of actuator ports (309a, 309b), a communication passage (the inverted U-shaped passage) communicable to the actuator ports, a parallel passage (307) connecting the plural directional control valves in parallel with each other, a tandem passage (the center passage co-axial with the relief valves) connecting the plural directional control valves in series with each other, a first check valve (Col.1, Lns. 46,62, "urging the load hold check valve 303 in a downward direction") for permitting a flow of pressure fluid from the parallel passage toward the communication passage and preventing any flow of pressure fluid in an opposite direction, and a second check valve (303, when exerted from a pressure below the head 303) arranged coaxially with the first check valve for permitting a flow of pressure fluid from the tandem passage toward the communication passage and preventing any flow of pressure fluid in an opposite direction, characterized in that, one of the first check valve and the second check valve is slidably arranged in the other, a plug (as shown in Figure 2) is arranged in threaded engagement with the valve main body such that an end portion of the first check valve and an end portion of the second check valve are covered (the plug covers both valves from above) by the plug, and a spring (depicted within 303) is arranged between at least one of the first check valve and second check valve and the plug such that the first check valve and the second check valve are biased in closing directions.

Regarding claim 4, Cho discloses that the second check valve (the lower valve having the head as shown in exploded view Figure 2) is slidably arranged in the first check valve.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cho '967 in view of Alderfer et al. (5,095,939).

Cho is silent to having a first check valve slidably arranged in the second check valve and the second check valve is provided with a through hole formed in communication with the communication passage and, the second check valve is internally provided with a seat portion with which the first check valve is normally maintained in contact.

Alderfer et al. discloses a redundant pressurizing valve which teaches the use of a first check valve (46) slidably arranged in the second check valve (36,50) and the second check valve is provided with a through hole (40) formed in communication with the communication passage and, the second check valve is internally provided with a seat (44) portion with which the first check valve is normally maintained in contact.

It would have been obvious to one of ordinary skill in the art at the time of invention to substitute the first and second check valves of Alderfer et al. with the first and second check valves of Cho, as one would have expected the valves to perform as equally as well.

Allowable Subject Matter

Claim 5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The check valves of Stephens (3,901,264) and Hirata et al. (5,315,826) are not biased closed by a spring, and the check valves of Tennis (3,534,774) are used for a single spool valve.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571)272-2712. The examiner can normally be reached on 7AM - 5:30PM Mon-Thurs, Increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP

11 July 2008

/Stephen M. Hepperle/
Primary Examiner, Art Unit 3753

/C. P./
Examiner, Art Unit 3753